

Name and title: Maciej Pach, PhD., DSc. Associate Professor



University of Agriculture in Krakow

Faculty of Forestry

Address: al. 29 Listopada 46, 31-425 Kraków, Room 716

Phone: +48 12 6625371

Email: maciej.pach@urk.edu.pl

Consultation hours: to be determined

Research interest:

- close-to-nature silviculture,
- adaptive forest management,
- primeval (old-growth) forests,
- mixed species forests,
- climate-smart forestry

Research experience:

Visiting Scholar: Chair for Forest Growth and Yield Science, Faculty of Forest Science and Resource Management, Technical University of Munich, Germany 1.10.2018 – 30.11.2018 and 1.09.2019 – 30.09.2019

DSc, (Habilitation): 2016 Modelling of a basal area increment of silver fir in young and middle-aged forest stands with a beech and spruce share in the Polish Carpathians

PhD: 2001 The assessment of impact of bark-stripping caused by red-deer on selected quantitative and qualitative features of Silver fir growing in sapling development stage in the area of Krynica Experimental Forests

MSc: 1990 Assessment of the degree of contamination by radioactive elements of forests in Gorce

Professional profiles:

ORCID: <https://orcid.org/0000-0002-9833-867X>

Research ID: <https://publons.com/researcher/R-5286-2016/>

Mendeley: <https://www.mendeley.com/profiles/maciej-pach/>

Research Gate: https://www.researchgate.net/profile/Maciej_Pach

Academia: <https://urkrakow.academia.edu/MaciejPach/>

Google Scholar: <https://scholar.google.com/citations?hl=pl&user=1bwtc2oAAAAJ>

LinkedIn: <https://www.linkedin.com/in/mpach1>

Scopus: <https://www.scopus.com/authid/detail.uri?authorId=55753513800>

List of publications: (10 najważniejszych z 5 ostatnich lat)

1. Bowditch E., Santopuoli G., Binder F., del Río M., La Porta N., Kluvankov T., Lesiński J., Motta R., Pach M., Panzacchi P., Pretzsch H., Temperli Ch., Tonon G., Smith M., Velikova V., Weatherall A., Tognetti R. 2020. *What is Climate-Smart Forestry? A definition from a multinational collaborative process focused on mountain regions of Europe*. Ecosystem Services 43, 101113 <https://doi.org/10.1016/j.ecoser.2020.101113>
2. Steckel M., del Río M., Heym M., Aldea J., Bielak K., Brazaitis G., Černý J., Coll L., Collet C., Ehbrecht M., Jansons J., Nothdurft A., **Pach M.**, Pardos M., Ponette Q., Reventlow D.O.J., Sitko R., Svoboda M., Vallet P., Wolff B., Pretzsch H. 2020. *Species mixing reduces drought susceptibility of Scots pine (*Pinus sylvestris* L.) and oak (*Quercus robur* L., *Quercus petraea* (Matt.) Liebl.) – Site water supply and fertility modify the mixing effect*. Forest Ecol. Manage., 461, 117908. <https://doi.org/10.1016/j.foreco.2020.117908>
3. **Pach M.**, Sansone D., Ponette Q., Barreiro S., Mason B., Bravo-Oviedo A., Löf M., Bravo F., Pretzsch H., Lesiński J., Ammer C., Ćodan M., Peric S., Bielak K., Brazaitis G., del Río M., Dezzotti A., Drössler L., Fabrika M., Fonseca T., Govedar Z., Kangur A., Kurylyak V., Loguercio G.A., Libietė-Zalite Z., Madsen P., Matović B., Meliadis I., Meliadis M., Metslaid M., Mounir F., Müller-Using S., Short I., Souidi Z., Sterba H., Stojanović D., Svoboda M., Verheyen K., Yildiz O., Zahvoyska L., Zlatanov T., Corona P. 2018. *Silviculture of Mixed Forests: A European Overview of Current Practices and Challenges*. [w:] Bravo-Oviedo A., Pretzsch H., del Río M. (red) Dynamics, Silviculture and Management of Mixed Forests. Managing Forest Ecosystems. Vol 31, Springer Cham, 185-253. https://doi.org/10.1007/978-3-319-91953-9_6
4. Forrester D.I., Ammer Ch., Annighöfer P.J., Barbeito I., Bielak K., Bravo-Oviedo A., Coll L., del Río M., Drössler L., Heym M., Hurt V., Löf M., den Ouden J., **Pach M.**, Pereira M.G., Plaga B.N.E., Ponette Q., Skrzyszewski S., Sterba H., Svoboda M., Zlatanov T.M., Pretzsch H. 2018. *Effects of crown architecture and stand structure on light absorption in mixed and monospecific *Fagus sylvatica* and *Pinus sylvestris* forests along a productivity and climate gradient through Europe*. J. Ecol., 106: 746–760. <https://doi.org/10.1111/1365-2745.12803>
5. Coll L., Ameztegui A., Collet C., Löf M., Mason B., **Pach M.**, Verheyen K., Abrudan I., Barbati A., Barreiro S., Bielak K., Bravo-Oviedo A., Ferrari B., Govedar Z., Kulhavy J., Lazdina D., Metslaid M., Mohren F., Pereira M., Peric S., Rasztovits E., Short I., Spathelf P., Sterba H., Stojanović D., Valsta L., Zlatanov T., Ponette Q. 2018. *Knowledge gaps about mixed forests: What do European forest managers want to know and what answers can science provide?* Forest Ecol. Manage., 407: 106–115. <https://doi.org/10.1016/j.foreco.2017.10.055>
6. Forrester D.I., Ammer Ch., Annighöfer P.J., Avdagic A., Barbeito I., Bielak K., Brazaitis G., Coll L., del Río M., Drössler L., Heym M., Hurt V., Löf M., Matović B., Meloni F., den Ouden J., **Pach M.**, Pereira M.G., Ponette Q., Pretzsch H., Skrzyszewski J., Stojanović D., Svoboda M., Ruiz-Peinado

- R., Vacchiano G., Verheyen K., Zlatanov T., Bravo-Oviedo A. **2017**. *Predicting the spatial and temporal dynamics of species interactions in Fagus sylvatica and Pinus sylvestris forests across Europe*. Forest Ecol. Manage., 405: 112–133. <https://doi.org/10.1016/j.foreco.2017.09.029>
7. del Río M., Pretzsch H., Ruíz-Peinado R., Ampoorter E., Annighöfer P., Barbeito I., Bielak K., Brazaitis G., Coll L., Drössler L., Fabrika M., Forrester D.I., Heym M., Hurt V., Kurylyak V., Löf M., Lombardi F., Madrickiene E., Matović B., Mohren F., Motta R., den Ouden J., **Pach M.**, Ponette Q., Schütze G., Skrzyszewski J., Šrámek V., Sterba H., Stojanović D., Svoboda M., Zlatanov T.M., Bravo-Oviedo A. **2017**. *Species interactions increase the temporal stability of community productivity in Pinus sylvestris–Fagus sylvatica mixtures across Europe*. J. Ecol., 105: 1032-1043. <https://doi.org/10.1111/1365-2745.12727>
 8. Dirnberger G., Sterba H., Condés S., Ammer Ch., Annighöfer P., AvdagićA., Bielak K., Brazaitis G., Coll L., Heym M., Hurt H., Kurylyak V., Motta R., **Pach M.**, Ponette Q., Ruiz-Peinado R., Skrzyszewski J., Šrámek V., de Streel G., Svoboda M., Zlatanov T., Pretzsch H. **2017**. *Species proportions by area in mixtures of Scots pine (Pinus sylvestris L.) and European beech (Fagus sylvatica L.)*. Eur. J. Forest Res., 136: 171-183. <https://doi.org/10.1007/s10342-016-1017-0>
 9. Condés S., Vallet P., Bielak K., Bravo-Oviedo A., Coll L., Ducey M.J., **Pach M.**, Pretzsch H., Sterba H., Vayreda J., del Río M. **2017**. *Climate influences on the maximum size-density relationship in Scots pine (Pinus sylvestris L.) and European beech (Fagus sylvatica L.) stands*. Forest Ecol. Manage., 385: 295–307. <https://doi.org/10.1016/j.foreco.2016.10.059>
 10. Pretzsch H., del Río M., Schütze G., Ammer Ch., Annighöfer P., Avdagic A., Barbeito I., Bielak K., Brazaitis G., Coll L., Drössler L., Fabrika M., Forrester D.I., Kurylyak V., Löf M., Lombardi F., Matović B., Mohren F., Motta R., den Ouden J., **Pach M.**, Ponette Q., Skrzyszewski J., Šrámek V., Sterba H., Svoboda M., Verheyen K., Zlatanov T., Bravo-Oviedo A. **2016**. *Mixing of Scots pine (Pinus sylvestris L.) and European beech (Fagus sylvatica L.) enhances structural heterogeneity, and the effect increases with water availability*. Forest Ecol. Manage., 373: 149–166. <https://doi.org/10.1016/j.foreco.2016.04.043>
 11. del Río M., Pretzsch H., Alberdi I., Bielak K., Bravo F., Brunner A., Condés S., Ducey M.J., Fonseca T., von Lüpke N., **Pach M.**, Peric S., Perot T., Souidi Z., Spathelf P., Sterba H., Tijardovic M., Tomé M., Vallet P., Bravo-Oviedo A. **2016**. *Characterization of the structure, dynamics, and productivity of mixed-species stands: review and perspectives*. Eur. J. Forest Res., 135: 23-49. <https://doi.org/10.1007/s10342-015-0927-6>
 12. Pretzsch, H., del Río, M., Ammer, Ch., Avdagic, A., Barbeito, I., Bielak, K., Brazaitis, G., Coll, L., Dirnberger, G., Drössler, L., Fabrika, M., Forrester, D. I., Godvod, K., Heym, M., Hurt, V., Kurylyak, V., Löf, M., Lombardi, F., Matović, B., Mohren, F., Motta, R., den Ouden, J., **Pach, M.**, Ponette, Q., Schütze, G., Schweig, J., Skrzyszewski, J., Sramek, V., Sterba, H., Stojanović, D., Svoboda, M., Vanhellefont, M., Verheyen, K., Wellhausen, K., Zlatanov, T., Bravo-Oviedo, A. **2015**. *Growth and yield of mixed versus pure stands of Scots pine (Pinus sylvestris L.) and European beech (Fagus sylvatica L.) analysed along a productivity gradient through Europe*. Eur. J. Forest Res., 134(5): 927-947. <https://doi.org/10.1007/s10342-015-0900-4>
 13. Skrzyszewski J., **Pach M.** **2015**. *Crookedness of pedunculate oak (Quercus robur L.) growing under a canopy of Scots pine (Pinus sylvestris L.)*. Scand. J. Forest Res., 30(8): 688-698. DOI:10.1080/02827581.2015.1048713 <https://doi.org/10.1080/02827581.2015.1048713>